

Title (en)  
INTEGRATED THERMAL PROCESSING FOR MESOPHASE PITCH PRODUCTION, ASPHALTENE REMOVAL, AND CRUDE OIL AND RESIDUE UPGRADING

Title (de)  
INTEGRIERTE THERMISCHE VERARBEITUNG FÜR DIE HERSTELLUNG VON PECH IN DER MESOPHASE, ASPHALTENENTFERNUNG UND ROHÖL SOWIE AUFWERTUNG VON RÜCKSTÄNDEN

Title (fr)  
TRAITEMENT THERMIQUE INTÉGRÉ POUR LA PRODUCTION DE MÉSOPHASE DE BRAI, L'ÉLIMINATION D'ASPHALTÈNE ET LA TRANSFORMATION DE PÉTROLE BRUT ET DE RÉSIDUS

Publication  
**EP 3625311 A1 20200325 (EN)**

Application  
**EP 18740012 A 20180619**

Priority  
• US 201715626726 A 20170619  
• US 2018038231 W 20180619

Abstract (en)  
[origin: US2018362855A1] A method for producing mesophase pitch includes the steps of flushing a vessel with an at least substantially inert gas to remove air and oxygen from the vessel; charging the vessel with a hydrocarbon feed; pressurizing the vessel to an initial increased pressure; heating the vessel to a pre-determined temperature; and maintaining the vessel at the pre-determined temperature for an amount of time operable to upgrade the hydrocarbon feed to a product comprising mesophase pitch.

IPC 8 full level  
**C10C 3/00** (2006.01)

CPC (source: EP KR US)  
**B01J 8/10** (2013.01 - KR US); **C01B 21/00** (2013.01 - EP KR US); **C10C 3/00** (2013.01 - EP US); **C10C 3/002** (2013.01 - EP KR US); **C10G 21/003** (2013.01 - EP KR US); **D01F 9/14** (2013.01 - US); **G01N 23/20075** (2013.01 - US); **Y02P 20/129** (2015.11 - EP)

Citation (search report)  
See references of WO 2018236832A1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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DOCDB simple family (publication)  
**US 10508240 B2 20191217; US 2018362855 A1 20181220**; CN 110770324 A 20200207; EP 3625311 A1 20200325; EP 3625311 B1 20211124; JP 2020524202 A 20200813; JP 6907347 B2 20210721; KR 102355404 B1 20220208; KR 20200019710 A 20200224; SA 519410725 B1 20220626; SG 11201911720W A 20200130; WO 2018236832 A1 20181227

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